

Am 9/22/01
10. An immunogenic composition comprising a truncated, membrane-free derivative of a polypeptide comprising a membrane-binding domain and antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by a pathogen, wherein said derivative:

H1

- (a) is devoid of the membrane-binding domain whereby the derivative is free of membrane, and
- (b) has exposed antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by the pathogen.

Sub. I
11. An immunogenic composition according to Claim ~~10~~ ²⁵ wherein the derivative is a derivative of glycoprotein D.

H2
12. An immunogenic composition according to Claim ~~10~~ ²⁵ wherein the derivative is a derivative of glycoprotein C.

H3
13. An immunogenic composition according to Claim ~~10~~ ²⁵ wherein the derivative is a derivative of glycoprotein B.

Sub. I
H4
20. An immunogenic composition according to Claim ~~10~~ ²⁵ wherein said immunogenic composition comprises a mixture of glycoproteins or glycoprotein derivatives.

21. An immunogenic composition according to Claim ~~20~~ ²⁵ wherein said mixture comprises glycoprotein C or a derivative thereof and glycoprotein D or a derivative thereof.

H5
22. An immunogenic composition according to Claim ~~20~~ ²⁵ wherein said mixture comprises glycoprotein D or a derivative thereof.

23. An immunogenic composition according to Claim ~~20~~ ²² wherein said mixture further comprises glycoprotein B or a derivative thereof.

H6
Sub. I
10. 14. 16. A method of producing an immunogenic composition according to any one of Claims ~~1, 2, 3, or 4~~ ^{10, 11, 12, 13}, said method comprising preparing a nucleic acid encoding said derivative, incorporating said nucleic acid into an expression vector, introducing said vector into a host cell, and collecting the derivative as a secretion product.

15. A method according to Claim ~~10~~ ¹⁴ wherein the host cell is a stable eukaryotic cell line.

16. A method according to Claim ~~11~~ ¹⁸ wherein the host cell is a mammalian cell line.

(Amended)

15. A method according to Claim 1 wherein the cell line is deficient in the production of dhfr and the vector contains a dhfr selectable marker.

18 16. (Amended) A method according to Claim 10 wherein the derivative is a glycoprotein D of herpes simplex virus type 1 or type 2.

19 18. (Amended) A method according to Claim 14 wherein the derivative comprises the first 300 amino acid residues of the glycoprotein D.

Please add the following claims:

25 16. An immunogenic composition according to Claim 1 wherein the derivative is a derivative of a herpes glycoprotein.

26 17. An immunogenic composition according to Claim 16 wherein the derivative is a derivative of herpes simplex virus type 1 or type 2, and the pathogen is herpes simplex type 1 and/or type 2.

27 18. An immunogenic composition according to Claim 18 wherein said derivative is produced in a stable eukaryotic cell line.

28 19. An immunogenic composition according to Claim 18 wherein said cell line is a mammalian cell line.

29 20. An immunogenic composition according to Claim 22 wherein said derivative comprises the first 300 residues of glycoprotein D.

30 21. A method according to Claim 10 wherein the derivative is a derivative of glycoprotein C.

31 22. A method according to Claim 10 wherein the derivative is a derivative of glycoprotein B.

32 23. A nucleic acid encoding a truncated, membrane-free derivative of a polypeptide comprising a membrane-binding domain and antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by a pathogen, wherein said derivative is:

- is devoid of the membrane-binding domain whereby the derivative is free of membrane, and
- has exposed antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by the pathogen.

Sub, I³ / 33 24. The nucleic acid of Claim 23 wherein the derivative is a derivative of a herpes glycoprotein.

Sab, I³ / 34 25. The nucleic acid of Claim 24 wherein the derivative is a derivative of a glycoprotein of a herpes simplex virus type 1 or type 2, and the pathogen is herpes simplex type 1 and/or type 2.

35 26. An expression vector comprising a nucleic acid according to Claim 24.

36 27. A stable host cell comprising an expression vector according to Claim 26.

37 28. A host cell according to Claim 27 wherein the host cell is a eukaryotic cell.

38 29. A host cell according to Claim 28 wherein the host cell is a mammalian host cell.

39 30. A method of producing a truncated, membrane-free derivative of a polypeptide comprising a membrane-binding domain and antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by a pathogen, said method comprising:

- (a) culturing the host cell of Claim 27; and
- (b) recovering the derivative from the culture.

40 31. An immunogenic composition comprising a truncated, membrane-free derivative of a polypeptide comprising a membrane-binding domain and antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by a pathogen, wherein said derivative:

- (a) is devoid of the membrane-binding domain whereby the derivative is free of membrane, and
- (b) has exposed antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by the pathogen, wherein the pathogen is a virus.

41 32. An immunogenic composition comprising a truncated, membrane-free derivative of a polypeptide comprising a membrane-binding domain and antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by a pathogen, wherein said derivative:

- (a) is devoid of the membrane-binding domain whereby the derivative is free of membrane, and
- (b) has exposed antigenic determinants capable of raising neutralizing antibodies against in vivo challenge by the pathogen, wherein said pathogen is a virus selected from the group